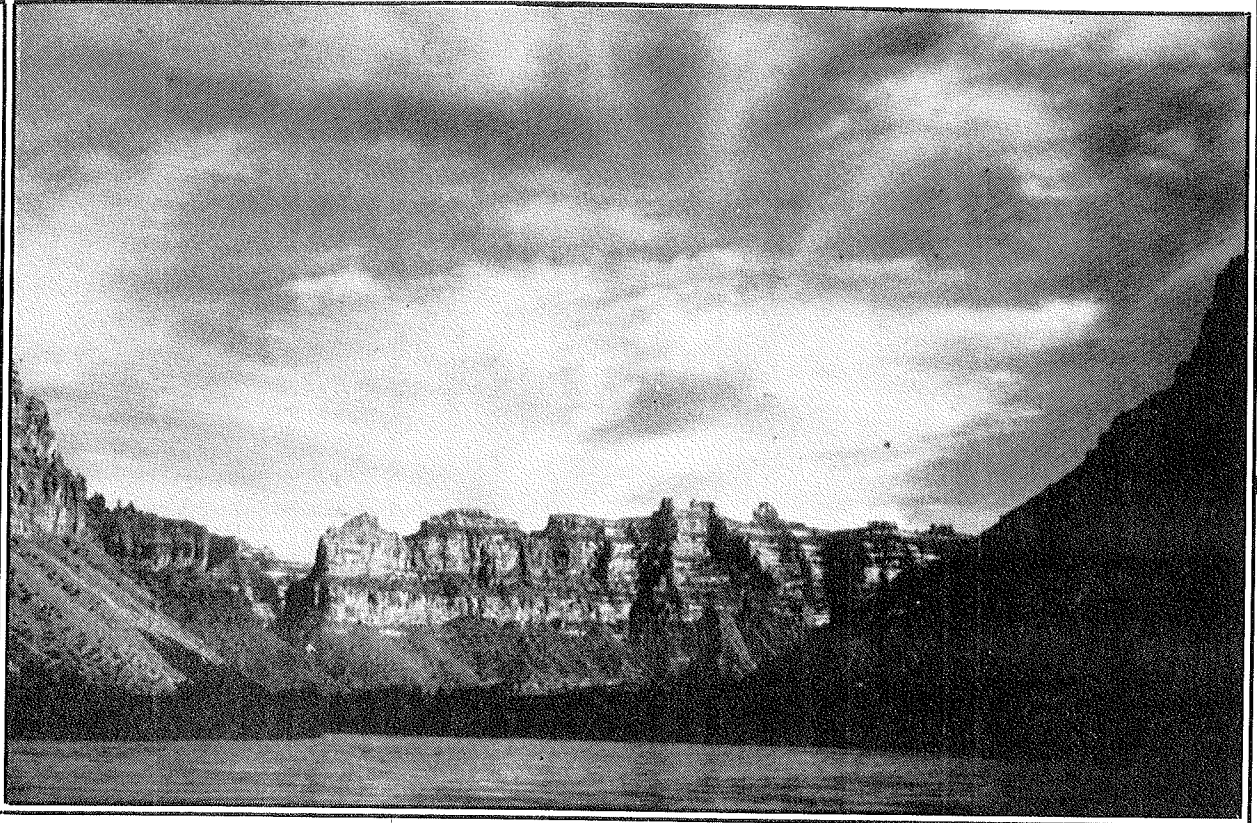


Desolation Canyon WSA



DESOLATION CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 290,845 acres

The Desolation Canyon Wilderness Study Area (WSA) (UT-060-068A) is in parts of Carbon, Emery, and Grand Counties, about 6 miles north of Green River, Utah (population 1,048), and about 8 miles east of Sunnyside, Utah (population 1,942) and East Carbon City, Utah (population 611). The WSA encompasses about 450 square miles and is the largest WSA in Utah. It extends about 50 miles from north to south and from 1 mile to 28 miles from east to west, and is shaped like an inverted "T".

The Green River forms most of the eastern boundary of the study area, except in the south in the vicinity of Gray Canyon, where the WSA includes part of the Beckwith Plateau on the west and part of the upper Book Cliffs on the east (see Map). Most of the rest of the boundary is along legal subdivisions and breaks in terrain.

The WSA contains 289,650 acres of public land administered by the Bureau of Land Management (BLM). An additional 840 acres of BLM land adjacent to but outside the WSA and 355 acres of split-estate with Federal surface were included in the study and are recommended for wilderness designation in this report. Forty sections (23,520 acres) of State land, two parcels (118 acres) of private land, and two parcels of split-estate (355 acres of Federal surface and State minerals) land are in the WSA. Thirty six sections of State land (20,961 acres) and all of the private and split-estate lands are within the portion of the WSA recommended for wilderness designation (see Table 1).

The WSA is in the Uinta Basin Section of the Colorado Plateau Physiographic Province. The Green River has cut a very deep, somewhat sinuous canyon through the plateaus bounded by the Roan and Book Cliffs.

In places the canyon walls are vertical and the canyon is quite narrow. The numerous tributary canyons are generally steep, in some cases falling several thousand feet in a few miles, and vary in width from narrow clefts to relatively wide gorges. The total length of per-

ennial streams in the WSA is 207 miles, 206 miles of which would be within the portion recommended for wilderness designation. Elevations range from a little above 4,000 feet along the Green River to 9,600 feet on the Tavaputs Plateau west of the river. Juniper-pinyon woodland is the predominant vegetation, mixed with or giving way to Douglas fir in some places at higher elevations. About one-fourth of the WSA is barren rock outcrop.

Climate varies with aspect and elevation, from arid to semiarid with warm to hot summers and generally cold winters.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November, 1990. Four alternatives were analyzed in the EIS: a partial wilderness alternative where 224,850 acres would be designated as wilderness and 65,995 acres would be released for uses other than wilderness, which is the recommendation in this report; a no action (no wilderness) alternative; an all wilderness alternative; and a smaller partial wilderness alternative of 144,510 acres.

2. RECOMMENDATION AND RATIONALE:

224,850 acres
(recommended for wilderness)
65,995 acres
(not recommended for wilderness)

The recommendation for this WSA is to designate 224,850 acres, including 840 acres outside but adjacent to the WSA, as wilderness and to release the remaining 65,995 acres for uses other than wilderness.

Addition of the 840-acre area outside the WSA would provide for integrated management of the entire Rock Creek drainage and would avoid isolating the upper part of the drainage between private land and the recommended wilderness.

Since publication of the Final EIS BLM has added two small tracts, one on Steer Ridge and one on Summerhouse Ridge, totaling 280 acres to the recommended wilderness. The tracts are along the west-

DESOLATION CANYON WILDERNESS STUDY AREA

TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	289,650
Split-Estate (BLM surface only) ^b	355
In-holdings (State, Private)	23,638
Total	313,643
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	223,655
BLM (outside the WSA)	840
Split-Estate (within the WSA)	355
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	224,850
In-holdings (State, private)	21,079
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	65,995
Split-Estate	0
Total BLM land not recommended for wilderness	65,995
In-holdings (State, Private)	2,559

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings and/or split-estate tracts included within the portion of the WSA recommended for designation.

^b In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

ern boundary of the WSA and are isolated between private land and the previously proposed wilderness.

The change in acreage is within the margin of error for acreage calculations, therefore, the recommended acreage has not changed. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical

means to avoid or minimize adverse environmental impacts. The recommendation will further apply to any additional in-holding acreage acquired through purchase or exchange with willing owners. The Appendix lists all in-holdings and split-estate tracts and provides additional information on acquisition of in-holdings and split-estate minerals.

All of the area that is recommended for wilderness designation is in a natural state and has outstanding opportunities for solitude and primitive recreation. Scenic values, landscape and ecological

DESOLATION CANYON WILDERNESS STUDY AREA

diversity, wildlife, archaeological sites, and historical interests are exceptional. The vast expanse of canyon, benches, and ridges is some of the most rugged and remote land in Utah. Diverse wildlife includes elk, bighorn sheep, black bears, mountain lions, three endangered fish species, bald eagles, and peregrine falcons. All 190 miles of wild and scenic river inventory segments in the WSA would be in the portion recommended for wilderness.

An 18-mile way along the Price River and on Beckwith Plateau would be cherry-stemmed, that is, excluded from the WSA. The plateau is currently not accessible by 4-wheel drive vehicles due to erosion of the way.

Water flows in the Green River are influenced by complex circumstances. The possibility exists for conflicts with developments that would consumptively use water upstream from the WSA on the Price River. Because the nature and magnitude of the conflicts are uncertain and the WSA has demonstrated wilderness values, as discussed above, wilderness values are given precedence. Special wording regarding upstream use of water would be appropriate in wilderness legislation for the Desolation Canyon WSA. Construction of a dam for hydroelectric uses on this part of the Green River is unlikely because of existing requirements, such as protection of endangered fish.

Oil and gas may be found in the recommended portion of the WSA, but the most likely locations for oil and gas exploration and development are outside the recommended area. In the recommended portion, wilderness values outweigh the importance of the energy and mineral resource potential.

Wilderness would be compatible with existing management of the adjacent Uintah and Ouray Indian Reservation Hill Creek Extension, to preserve roadless and natural values.

Approximately 95 percent of the area that is not recommended for wilderness designation is in a natural condition and has opportunities for primitive recreation. About 95 percent of the area

has outstanding opportunities for solitude.

The areas not recommended for wilderness designation are along the western edge and the southeastern border of the WSA where there is high potential for oil and gas and/or coal resources.

The Peter's Point oil and gas Unit, 5,350 acres of which are in the nonrecommended portion of the WSA (Area A), has proven gas resources. There are three producing gas wells inside the WSA in this area.

Approximately 8,000 acres of the nonrecommended portion of the WSA in the vicinity of Little Park Wash (Area C) are estimated to be underlain by approximately 140 million tons of recoverable coal. The presence of coal in this area has been demonstrated. It is also projected that further development of oil and gas resources is more likely in areas B, C, and D than in the central, less accessible part of the study area. Areas B and C surround the former Range Creek Known Geologic Structure (KGS) which has a well with production capability. About 510 acres of Area C are in leases held by production. There also is a well with production capability on a State section adjacent to Area D.

Overall, mineral potential is considered to outweigh wilderness values in several locations along the western margin and in the southeastern corner of the WSA, especially in comparison with the portion of the WSA that is recommended for wilderness designation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Overall, imprints significantly affect about 1 percent (2,935 acres) of the WSA.

DESOLATION CANYON WILDERNESS STUDY AREA

The remaining 287,910 acres of the WSA meets the naturalness criterion for areas under wilderness review. The rugged terrain and seasonal flash-flooding tend to reinforce and maintain the naturalness of the area.

In the 18-mile way along the Price River and onto the Beckwith Plateau is an unnatural intrusion, but has been excluded from the WSA by cherry-stemming. The way was mechanically constructed in 1974 and 1975 but is not maintained on a regular basis.

In the head of Naylon and Bobby Canyons, segments of a way constructed in the 1950s to access mining prospects remain. All segments are inaccessible and for the most part are only visible for short distances. Four prospects are located along the way also are not substantially noticeable.

Other imprints in the WSA include two livestock reservoirs, five spring developments, historic structures, gap fences, and a trough, none of which are considered substantially noticeable.

A 5-mile long way in Little Park is used for access to maintain livestock ponds. A 1-mile section of mechanically constructed trail between Range Creek and the Last Chance Benches is impassable. About 4 miles of two partially revegetated seismograph ways extend to the points between the Green and Price Rivers. Portions of an abandoned road that extends about 6 miles along the west side of the Green River between Gunnison Butte and the Price River are still visible, although much of the road has either revegetated or been covered by landslides.

Since the intensive inventory in 1980, about 4.2 miles of road and five drill pads totaling 6.2 acres were built for the purpose of drilling five gas well sites in the WSA. This disturbance occurred on leases issued between 1951 and 1971. Production was attained at three of the sites, and the roads are likely to remain for 20 to 30 years. About 1.5 miles of road also extends to a drill site along Cedar Ridge south of Jack Creek (now cherry-stemmed from the WSA). About 3 miles of abandoned road extends out of a southern fork of Cedar

Ridge to an abandoned drill site. This also is cherry-stemmed from the WSA. Some revegetation has occurred and apparently the road is no longer used.

Other surface-disturbing activities that have occurred since the BLM Wilderness Inventory, include seismic lines, trail maintenance, and stream exclosures and stabilization structures on Rock Creek. These activities have not significantly affected the naturalness of the WSA as a whole and will become less noticeable in time due to natural weathering processes.

B. Solitude

In all, about 90 percent (261,760 acres) of the WSA meets the criterion for solitude due to very rugged terrain or to terrain and vegetation. Another 9 percent of the WSA (26,150 acres) in the areas where topographic screening is not dominant, also meet the criterion due solely to vegetative cover. In the remaining 1 percent (2,935 acres) in the drainages of Jack Creek, on Cedar Ridge, and on the east side of the Green River along existing roads, opportunities for solitude are less than outstanding.

The size, configuration, terrain, and vegetation of the WSA enhance opportunities for solitude. Canyons ranging from 1,000- to 5,000-feet deep are separated by narrow ridges in the north and benches or plateaus in the south. There are about 400 to 450 miles of canyon bottom within the WSA. Lines of sight along the bottoms rarely exceed a 0.5 mile and are usually considerably less. Canyons in the northern half of the WSA generally become more V-shaped from east to west. Canyons along the river and in the south of the WSA nearly all alternate near vertical walls with steep talus slopes. The terrain in 90 percent (261,760 acres) of the WSA creates outstanding opportunities for solitude. The Uintah and Ouray Indian Reservation along the Green River also influences opportunities for solitude. The land is rugged and scenic and has features similar to those on the opposite side of the river. It is undeveloped except for a dirt road between Chandler Canyon and Florence Creek that has been impassable to most vehicles since 1983.

DESOLATION CANYON WILDERNESS STUDY AREA

The most significant off-site influences include the town of Green River near the WSA on the south and vehicular use of 7 miles of cherry-stemmed county road east of the Green River. The road is regularly used. Recreational use in the area is a combination of day use, float boating, and park use by residents of Green River. Elsewhere, the WSA is separated from the town by 1,000-foot cliffs. The roads in Jack Creek and on Cedar Ridge affect opportunities for solitude as they are regularly used to check the existing well locations. Interstate Highway 70 (I-70) and Utah Highway 50 and 6 are visible from points along the Book Cliffs at distances of 2 to 5 miles. Parts of the WSA adjacent to the roads are as much as 1,000 feet higher, however, and the influence of traffic on solitude is not significant.

The Book Cliffs, ridge tops, and high benches south of the Roan Cliffs provide extensive overlooks of the terrain within the WSA. Looking from the WSA outward are vistas of mountain ranges 50 to 100 miles away to the north, south, and west.

C. Primitive and Unconfined Recreation

The entire WSA is well suited for a diversity of outstanding primitive recreation. Present use is primarily white-water river running and camping, hiking, fishing, swimming, and sightseeing activities associated with it. Based on these opportunities, the entire WSA meets the outstanding primitive recreation criterion for areas under wilderness review. Outstanding opportunities and uses likely to expand in the near future are horseback activities and more extensive hiking, including backpacking or dayhikes from lodges or access points around the WSA. Hunting uses would be expected to continue, and more mountaineering or winter sports use may occur.

D. Special Features

The WSA has a substantial number of important features. Elevation varies by more than 5,500 feet and types of vegetation and wildlife habitat vary. In the north portion of the WSA, water is relatively abundant, especially for an area in the arid southwest. The extreme ruggedness of the terrain contributes to

the WSA's scenic quality, remoteness, and habitat for species such as raptors and bighorn sheep which are sensitive to development. The WSA contains both canyon desert and high mountain environments.

Among the special features in Desolation Canyon is the topographical diversity. The WSA has an extensive system of deep canyons. The canyon at Rock Creek is more than 1 mile deep. The WSA contains arches, pinnacles, and other erosional remnants not known to occur elsewhere in the Wasatch Formation in similar concentrations or settings. Vegetation is diverse, ranging from desert to high mountain types in a distance of only 5 or 10 miles. The Uintah Basin hookless cactus (Sclerocactus glaucus) is a threatened plant species that may occur in or near the WSA. There are five other plant species that are considered special status species that occur, or may occur, within the WSA. The diversity of wildlife in the WSA is unusual compared with public lands surrounding the WSA. There are six animal species (peregrine falcon, black-footed ferret, bald eagle, Colorado squawfish, humpback chub, and bony-tail chub) listed as endangered that occur, or may occur, in the WSA.

There are ten other special status animal species and five plant species that are considered sensitive that also occur, or may occur, within the WSA. One of these species, the razorback sucker, has been designated as threatened in Utah by the Utah Division of Wildlife Resources (UDWR). The WSA has populations of cougar, elk, Rocky Mountain bighorn sheep, and black bear, which are wildlife species associated with wilderness.

Refer to the Vegetation and Wildlife Including Special Status Species sections and Appendix 4 of the Utah BLM Statewide Wilderness Final EIS for additional information.

Approximately 90 percent (261,860 acres) of the WSA is rated as outstanding for scenic quality. The WSA includes both Flat Canyon Archaeological District and a portion of Desolation Canyon National Historical Landmark. The WSA has several known archaeological sites in addition to those in the archaeological district.

DESOLATION CANYON WILDERNESS STUDY AREA

Seven of the known sites are potential National Register sites. The Range Creek wild horse herd of approximately 25 horses is on Cedar Ridge in the WSA. Water is abundant in the northern half of the WSA. The WSA has about 200 miles of perennial rivers and streams. Approximately 191 miles of three rivers (Green River, Price River, and Range Creek) that flow through the WSA are wild and scenic river inventory segments.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is Douglas fir forest (59,090 acres), juniper-pinyon woodland (144,825 acres), and saltbush-greasewood (86,930 acres).

The Douglas fir forest PNV is not represented at all in the NWPS and is represented in only two other BLM wilderness study areas, both of which are in Utah.

The other two PNV types in the WSA are represented in the NWPS in other BLM study areas, although the saltbush-greasewood PNV would occur only in Utah.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (Five Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah and Provo-Orem, Utah, standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Desolation Canyon WSA could contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Douglas Fir Forest	0	0	2	10,180
Juniper-Pinyon Woodland	11	1,401,745	84	1,999,180
Saltbush-Greasewood	1	20,000	17	307,073
UTAH (COLORADO PLATEAU PROVINCE)				
Douglas Fir Forest	0	0	2	10,180
Juniper-Pinyon Woodland	1	26,000	53	1,561,373
Saltbush-Greasewood	1	20,000	17	307,073

Source: BLM File Data.

DESOLATION CANYON WILDERNESS STUDY AREA

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,079,807	78	1,968,830
Provo-Orem, Utah	11	708,638	90	2,496,023

Source: BLM File Data.

As of January 1987, the NWPS included 44 areas comprising 3,443,330 acres in Utah and Colorado, the adjacent state nearest the WSA.

A Desolation Canyon Wilderness would supplement the NWPS in the Uinta Basin Section of the Colorado Plateau where there are no established wilderness areas. There are five designated wilderness areas within 100 miles of the WSA. To the northwest are the 8,922-acre Lone Peak Wilderness (U.S. Forest Service [FS]), the 10,750-acre Mt. Timpanogas Wilderness (FS), and the 28,000-acre Mt. Nebo Wilderness (FS); to the north-northwest is the 456,705-acre High Uintas Wilderness (FS); and to the south is the 45,000-acre Dark Canyon Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The portion of the WSA recommended for wilderness designation can reasonably be managed as wilderness to preserve values now present in the area. A potential threat to manageability in this area is the presence of 36 sections of State land (20,961 acres), two parcels of private land (118 acres), and two parcels of split-estate land (355 acres) with Federal surface and State minerals. Because of the known oil and gas potential of the WSA up to 35 miles of access road could be required in the recommended portion of the WSA for access to in-held lands for oil and gas exploration. The majority of the access to in-held lands would be restricted to the Rattlesnake Canyon area east of the Green River. Of the 20,961 acres of State land in the recommended portion of the WSA, 7,763 are leased for livestock grazing and

13,020 are leased for minerals. Grazing is the only activity occurring on State lands in the WSA at this time.

Approximately 1,560 acres of leases held by production would be in the area recommended for wilderness designation in the vicinity of Jack Creek. Development is likely in this area following designation, but this would not significantly affect the overall manageability of the recommended area.

There are only three mining claims presently in the area recommended for wilderness designation. Development is not expected in the foreseeable future on these claims because the likelihood of production is low.

Portions of the 65,995-acre area not recommended for wilderness designation would not be manageable as wilderness. There are 2,559 acres of State land in-held in this area and the probability of additional access roads to these lands in areas C and D (see Map) is high because the likelihood of additional oil and gas exploration and production is high. Area A has three producing wells and 5,350 acres of pre-FLPMA leases in the Peter's Point Unit where additional development is likely. There are a total of 4,346 acres of pre-FLPMA and 12,253 acres of post-FLPMA oil and gas leases in the area not recommended for wilderness designation where additional oil and gas development is likely to occur even if the area is designated as wilderness.

About 640 of the 2,559 acres of in-held State lands in the area not recommended for wilderness are leased for livestock grazing, and all of the in-held State lands are leased for minerals. Grazing

DESOLATION CANYON WILDERNESS STUDY AREA

is the only present activity on these lands.

There are no mining claims or conflicts with locatable mineral development likely to occur in the area not recommended as wilderness.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) have prepared a mineral assessment report for the Desolation Canyon WSA (USGS Bulletin 1753-B, William B. Cashion, et. al., 1990). Coal resources include 22 million tons in beds of 3.5 feet or more thick and under 2,000 feet or less of overburden. Subeconomic oil shale deposits exist in the northernmost part of the WSA containing approximately 60 million barrels of oil in place. The northern part of the area is also known to contain a thick sequence of bituminous sandstone of undetermined grade and extent. The WSA is also known to have minor occurrences of uranium. The study area also has high potential for undiscovered oil and gas in the northern part, and a moderate potential for oil and gas in the central and southern part. The WSA has high potential for additional coal resources, low potential for uranium, and moderate potential for tar sand.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

With BLM's recommended partial wilderness alternative, present economic conditions and trends would not be significantly affected. In the long term, coal mining would provide about 300 jobs. This is equivalent to 2.3 percent of the projected Carbon County employment in the year 2010. Employment in oil and gas exploration and development would continue in the nondesignated area and on leases held by production in the designated area, but would be for a shorter period of time than with the no action/no wilderness alternative because potential for oil and gas production would be

foregone on 74 percent of the leasable portion of the WSA. Recreation-related local sales could contribute up to \$1,264,265 annually to the local economy by the year 2020. The WSA would contribute \$135,880 annually in local livestock sales and \$10,463 in grazing fees. Oil and gas leasing fees of up to \$356,660 annually would be foregone because the designated area would be closed to leasing. Additionally, potential Federal and State revenues from royalty payments would be reduced by as much as \$1 million per year, depending on demand and production levels. Federal revenues from commercial recreation outfitting would probably increase as the area becomes better known after designation.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 156 inputs specifically addressing this WSA were received from 771 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs. In general, 369 commenters supported wilderness designation for part or all of the WSA, while 396 commenters were opposed. Six commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented on the need to protect wilderness values in the WSA from development, preserve the area for future generations, and add the diversity within the WSA to the NWPS. The majority of those commenting in favor of wilderness were from other states.

Those opposing wilderness were concerned that wilderness would preclude mineral

DESOLATION CANYON WILDERNESS STUDY AREA

exploration and development, restrict public access and livestock management, harm local and State economies, cause Federal air quality standards for the region to become more restrictive, and they stated that wilderness is not compatible with multiple use. Most of those opposing wilderness designation were from rural Utah.

Two Federal agencies, the U.S. Bureau of Reclamation (USBOR), and the USBM, commented on the Draft EIS for this WSA. The USBOR commented regarding the past study of a reclamation project, the Gray Canyon Dam, in the WSA. The Bureau did not take a position regarding wilderness designation but noted that planning for this project would remain inactive in the foreseeable future. The USBM also did not take a position on wilderness designation but commented that the findings of the USGS and USBM mineral surveys should be included in the Final EIS. These findings are considered in the Final EIS and this study report.

No comment letters were received on the Final EIS.

There are 40 sections of State land in the WSA. In commenting on the Draft EIS the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that the WSA has the highest wilderness values in its region but also has a very high degree of mineral conflict, potential conflicts with a deep water aquifer, and hydro-power generation.

The Carbon, Emery, and Grand County land use plans do not specifically address wilderness designation. The County Commissions are opposed to wilderness designation of the Desolation Canyon WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Commissions stated that there is no need for designation as a wilderness to preserve the qualities found in this WSA. Protection is available in the form of National Landmark designation. The Commissions also believe that development is already taking place that would be disruptive to the wilderness environment contemplated in

the Wilderness Act, and that State and private in-holdings would create severe management problems. The Commissions fear that wilderness designation would bring changes in air quality requirements and would establish Federal reserved water rights that would negatively impact present and future economic conditions in the counties.

DESOLATION CANYON WSA

Table 4
Comparative Summary of Impacts by Alternativea

Alternatives				
Issue Topic	Recommendation			
	Large Partial Wilderness (224,850 Acres)	No Action/No Wilderness	All Wilderness (290,845 Acres)	Small Partial Wilderness (144,510 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved overall in the designated area which is 77 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost and Class A scenery would be directly reduced in quality on 223 acres of the WSA. The disturbance would be due to mineral exploration and development, rangeland projects, and construction of access to State in-holdings. Opportunities for solitude and primitive recreation, visual qualities, and habitat for wildlife associated with wilderness would be indirectly reduced in quality on up to 87,253 acres of the WSA. Most of the impact would be in the nondesignated area. All wild and scenic river values would receive additional protection.	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 423 acres of the WSA. The disturbance would be due to mineral exploration and development, rangeland projects, and access to State in-holdings. Class A scenery would be directly reduced in quality in disturbed areas. Opportunities for solitude and primitive recreation, wildlife habitat, and scenic quality would be indirectly reduced in quality on up to 116,338 acres of the WSA. Wild and scenic river values would not receive additional protection but no loss is anticipated in the foreseeable future.	Wilderness designation would preserve overall the wilderness values in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation and scenic quality would be directly lost on 143 acres of the WSA. The disturbance would be due to mineral exploration and development, rangeland projects, and access to State in-holdings. Opportunities for solitude and primitive recreation, habitat for wilderness-dependent wildlife species, and scenic quality would be indirectly reduced in quality on up to 58,170 acres of the WSA. All wild and scenic river values would receive additional protection.	Wilderness values would be preserved overall in the designated area which is 50 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost and the quality of Class A scenery would be directly reduced on 373 acres of the WSA. The disturbance would be due to mineral exploration and development, rangeland projects, and access to State in-holdings. Opportunities for solitude and primitive recreation, visual qualities, and habitat for wildlife associated with wilderness would be indirectly reduced in quality on up to 101,795 acres of the WSA. Most of the impact would be in the nondesignated area. All wild and scenic river values would receive additional protection.
	Topography would be altered by surface disturbance on 0.09 percent (273 acres) of the WSA. Underground mining of coal would cause subsidence and surface fractures on 2.7 percent (8,000 acres) of the WSA.	Topography would be altered by surface disturbance on about 0.1 percent (423 acres) of the WSA. Underground mining of coal would cause subsidence and surface fractures on up to 2.7 percent (8,000 acres) of the WSA.	Topography would be altered on 0.05 percent (143 acres) of the WSA.	Topography would be altered by surface disturbance on about 0.13 percent (373 acres) of the WSA. Underground mining of coal would cause subsidence and surface fractures on up to 2.7 percent (8,000 acres) of the WSA.

DESOLATION CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation Large Partial Wilderness (224,850 Acres)	No Action/No Wilderness (290,845 Acres)	Small Partial Wilderness (144,510 Acres)
Impacts on Soils	There would be localized increases to erosion on 273 acres (0.09 percent of the WSA). Overall soil loss from the WSA would increase by 0.7 percent (1,335 cubic yards per year).	There would be localized increases of erosion on 423 acres. Overall, annual soil loss from the WSA would increase by 1 percent (2,068 cubic yards).	There would be localized increases in soil erosion on 373 acres. Overall, loss from the WSA would increase less than 1 percent (2,088 cubic yards).
Impacts on Vegetation	Approximately 273 acres (0.09 percent) of the vegetation in the WSA would be modified. Populations of threatened endangered and special status plant species would be preserved.	Approximately 423 acres (0.1 percent) of the WSA would be modified with this alternative. Populations of special status species would be protected. Because necessary measures would be taken, it is concluded that individual plants could be inadvertently destroyed but the viability of populations of threatened, endangered, or special status plant species would be preserved with this alternative.	Approximately 373 acres (0.13 percent) of the vegetation in the WSA would be modified with this alternative. Populations of threatened, endangered, or special status plant species would be preserved.
Impacts on Water Resources	Sediment and salinity in Jack Creek, Rattlesnake Canyon, Range Creek, and the Price River would increase slightly as a result of surface disturbance. Such increase would not be measurable in the Green and Colorado rivers. Impacts on water use upstream of the WSA would be the same as with the All Wilderness Alternative because the Price River would flow through the designated area.	Sediment and salinity in Jack Creek, Range Creek, the Price River, and Rattlesnake, Tushar, and Long canyons would increase slightly as a result of surface disturbance. Such increases would not create measurable changes in water quality in the Green River or the Colorado River system.	Sediment and salinity in Jack Creek, Range Creek, The Price River, and Rattlesnake, Tushar, and Long Canyons would increase slightly as a result of surface disturbance. Such increases would not create measurable changes in water quality in the Green River or the Colorado River system. Impacts on water use upstream of the WSA would be the same as with the All Wilderness Alternative because the Price River would flow through the designated area.

DESOLATION CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation Large Partial Wilderness (224,850 Acres)	No Action/No Wilderness	All Wilderness (290,845 Acres)
Impacts on Mineral and Energy Exploration and Production	Potential for extraction of oil and gas would be foregone on 74 percent of the leaseable portion of the WSA. Coal exploration and production would not be affected. Loss of recovery potential of other mineral would not be significant because development is unlikely even without partial wilderness designation.	Implementation of this alternative would not adversely affect mineral exploration or production because mineral leasing, location of mining claims, and mineral developments could occur without restriction for the protection of wilderness values.	Wilderness designation would not affect production of gas wells or future development of leases held by production. Potential for extraction of an unknown but locally significant amount of oil and gas would be foregone. In the long term, 50 to 70 million tons of recoverable coal could not be mined
Impacts on Wildlife Habitat and Populations	Wildlife habitat and populations would be reduced slightly by direct disturbance on 0.09 percent (273 acres) of the WSA. Continued human presence and activities over the life of oil and gas wells and coal mines would reduce available habitat and intrude on populations of sensitive black bear, mountain lion, and bighorn sheep over about 30 percent (87,253 acres) of the WSA. Populations of endangered, threatened, and special status animal and fish species would be preserved.	Wildlife habitat and populations would be reduced slightly by direct disturbance of 0.1 percent (423 acres) of the WSA. Continued human presence and activities over the life of oil and gas wells and coal mines would reduce available habitat and intrude on populations of sensitive black bear, mountain lion, and bighorn sheep over about 40 percent (116,338 acres) of the WSA. Populations of endangered, threatened, and other special status animal and fish species would be preserved.	Wildlife habitat and populations would be reduced by direct disturbance of 373 acres (0.13 percent) of the WSA. Continued activities over the life of development projects would disturb available habitat and possible populations of sensitive black bear, cougar, and bighorn sheep on 35 percent (101,795 acres) of the WSA. Populations of endangered, threatened, and special status animal and fish species would be preserved.
Impacts on Visual Resources	Visual resources would be protected in the designated area. Visual resources would be degraded on approximately 30 percent (78,253 acres) of the WSA and VRM objectives would not be met on 273 acres.	Visual resources would be degraded on approximately 40 percent (116,338 acres) of the WSA. VRM objectives would not be met on 0.1 percent (423 acres) of the WSA.	Visual resources would be protected in the designated area. Visual resources would be degraded on approximately 35 percent (101,795 acres) of the WSA and VRM objectives would not be met on 373 acres.

DESOLATION CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Issue Topic	Recommendation	All Wilderness		
		No Action/No Wilderness	All Wilderness	Small Partial Wilderness
			(290,845 Acres)	(144,510 Acres)
Impacts on Cultural Resources	Large Partial Wilderness (224,850 Acres)	Seventy of the 76 recorded sites including the Flat Canyon Archaeological District, all National Register eligible sites, and the Desolation Canyon National Historical Landmark, would be protected by wilderness designation. The remaining six recorded sites and all unrecorded sites in the nondesignated portion would continue to be protected by existing laws.	Cultural resources would receive additional protection and few impacts are expected because only 0.05 percent of the WSA would be disturbed. Cultural resource management may be limited in scope and execution in order to protect other wilderness values.	Sixty-one of the 76 recorded sites including the Flat Canyon Archaeological District, all National Register eligible sites, and the Desolation Canyon National Historical Landmark, would be protected by wilderness designation. The remaining 15 recorded sites and all unrecorded sites in the nondesignated portion would continue to be protected by existing laws.
	Impacts on Recreation Use	Primitive recreation opportunities would be protected in the designated area. The quality of primitive recreation opportunities would be directly degraded on 273 acres and indirectly degraded on 30 percent (87,253 acres) of the WSA. Overall, recreational use would increase at the same rate as the other alternatives.	The quality of land and water based primitive recreational use would be protected and use would expand at the same rate as the No Action/No Wilderness Alternative. Overall, recreation use would be directly degraded on 143 acres and indirectly degraded on 20 percent (58,170 acres) of the WSA. The loss of vehicular opportunities in the WSA would not be significant on a regional basis because of the availability of nearby ORV areas.	Primitive recreation opportunities would be protected in the designated area. The quality of the primitive recreational experience would be directly degraded on 373 acres and indirectly degraded on about 35 percent (101,735 acres) of the WSA. Overall, recreational use would increase at the same rate as the other alternatives.

DESOLATION CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation Large Partial Wilderness (224,850 Acres)	No Action/No Wilderness (290,845 Acres)	Small Partial Wilderness (144,510 Acres)
Impacts on Economic Conditions	<p>In the long term, coal mining would provide 300 jobs. This is equivalent to 2.3 percent of the projected Carbon County employment in the year 2010. Employment in oil and gas exploration and development would continue in the nondesignated area and on 1,560 acres of leases held by production in the designated area, but would be for a shorter period of time than with the No Action/ No Wilderness Alternative because potential for oil and gas production would be foregone on 74 percent of the leaseable portion of the WSA. Recreation-related local sales could contribute up to \$1,264,265 annually to the local economy by the year 2020. The WSA would contribute \$135,880 annually in local livestock sales and \$10,463 in grazing fees. Oil and gas leasing fees of up to \$356,660 annually would be foregone because 178,330 acres presently open to lease and not held by production could not be leased. Additionally, potential Federal and State revenues from royalty payments would be reduced by as much as \$1 million per year, depending on demand and production levels. Federal revenues from commercial recreation outfitting (currently \$55,155 annually) would probably increase as the area becomes better known after designation.</p>	<p>Implementation of the No Action/No Wilderness Alternative would not alter existing local economic conditions. Future increases in recreation use, and oil, gas, and coal exploration and development would contribute significantly to the local economy of Carbon, Emery, and Grand Counties. Coal, oil, and gas development could increase employment in Carbon County by up to 500 jobs at one time. This would be a 3.8 percent increase in the projected employment in the county in the year 2010. Recreation-related local sales could contribute up to \$1,264,265 to the local economy by the year 2020. The WSA would contribute \$135,880 annually in local livestock sales and \$10,463 in grazing fees. Oil and gas leasing fees and royalty payments could contribute from \$484,110 to over \$1 million per year depending on production levels. Federal revenues from commercial recreation outfitting (currently \$55,155 annually) would continue.</p>	<p>The potential for 300 jobs related to coal mining would be foregone. This is equivalent to 2.3 percent of the projected Carbon County employment in the year 2010. Employment in oil and gas exploration and development would continue on 5,860 acres of leases held by production, but would be for a shorter period of time than with the No Action/ No Wilderness Alternative because potential for oil and gas production would be foregone on 97.6 percent of the leaseable portion of the WSA. Recreation-related local sales could contribute up to \$1,264,265 annually to the local economy by the year 2020. The WSA would contribute \$135,880 annually in local livestock sales and \$10,463 in grazing fees. Oil and gas leasing fees of up to \$472,390 annually would be foregone because 238,195 acres presently open to lease and not held by production could not be leased. Additionally, potential Federal and State revenues from royalty payments would be reduced by as much as \$1 million per year, depending on demand and production levels. Federal revenues from commercial recreation outfitting (currently \$55,155 annually) would probably increase as the area becomes better known after designation.</p>

^a The BLM San Rafael RMP was approved following publication of the BLM Utah Statewide Wilderness EIS. The analysis of impacts summarized here has been modified to reflect the more restrictive resource management practices established by the RMP.